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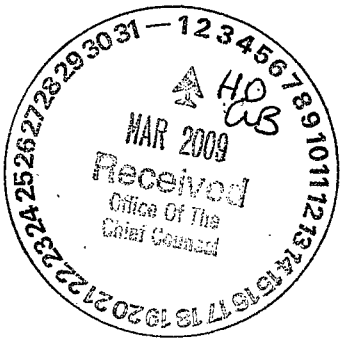

BEFORE THE STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

Ken Berry, and **California Citizens for Environmental Justice** **Petitioners**	**PETITION NO. _____** **PETITION FOR REVIEW OF APPROVAL OF WASTE DISCHARGE REQUIREMENTS ORDER No. R1-2009-0001 (Water Code §13320)**
North Coast Regional Water Quality Control Board **Acting Agency**	

INTRODUCTION AND SUMMARY

1. Exhibit A[1] is a copy of Waste Discharge Requirements Order (WDR) No. R1-2009-0001 (ORDER), which was approved by the North Coast Regional Water Quality Control Board (R1WB) on January 29, 2009. The ORDER was signed by the R1WB Executive Officer on January 29, 2009,

[1] The Exhibits are all attached to the MEMORANDUM OF POINTS AND AUTHORITIES in this case.

according to the unsigned copy on the R1WB website.

2. Exhibit B is a copy of the letter dated January 4, 2009, which comments on the staff report for the ORDER. Petitioners also submitted comments several times between December 2008 and January 2009.

3. The issue in this case is whether the North Coast Regional Water Quality Control Board (R1WB) proceeded according to law when it adopted a Negative Declaration (ND) for the project approved by WDR R1-2009-0001. Petitioners allege that the record of proceedings (ROP) for this case clearly shows the potential for significant adverse impacts on the environment and therefore it is not appropriate to use an ND for this project. In the circumstances of the project underlying this case, it is necessary to prepare an Environmental Impact Report (EIR).

PETITION INFORMATION

4. The following information is provided in accordance with the instructions on the SWB website at the following Internet address on February 22, 2008:

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http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml

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4.1. Name, address, telephone number, and email address of Petitioners:

Ken Berry

California Citizens for Environmental Justice

10567 Mariposa Avenue

Jackson, CA 95642

209-223-1769

berry-k@sbcglobal.net

4.2. Action or inaction:

Exhibit A is a copy of Waste Discharge Requirements Order (WDR) No. R1-2009-0001, which was approved on January 29, 2009 and signed by the Executive Officer

on January 29, 2009.

4.3. Date of action:

January 29, 2009

4.4. Statement of reasons why inaction is inappropriate or improper:

The North Coast Regional Water Quality Control Board (R1WB) failed to comply with the California Environmental Quality Act when it approved a Negative Declaration for a project for which there is evidence in the record of proceedings that there exists the potential for a significant adverse effect on the environment. The action is a continuation of a long standing, statewide pattern of unlawful activity intended to avoid analysis of the environmental consequences of actions approved by the State Water Resources Control Board (SWB) and its subordinate departments, the Regional Water Quality Control Boards (RWBs), of which R1WB is one.

4.5. How the petitioner is aggrieved:

Petitioners pay taxes and elect representatives to enact laws. Petitioners have the right to require those employed by the public to obey the rules and procedures lawfully enacted by the Legislature. The rules at issue in this action are for the protection of the health and safety of petitioners and other residents of California, and for the environment they live in. Because of the failure of the R1WB to comply with CEQA, hazardous chemicals have been spread more widely in the environment.

4.6. Action requested:

Petitioners request that the SWB order the North Coast Regional Water Quality Control Board to rescind and reconsider WDR No. R1-2009-0001 and to obey State law when doing so, or to take action directly.

4.7. Points and Authorities supporting Petitioners' request:

Refer to accompanying document, MEMORANDUM OF POINTS AND AUTHORITIES.

4.8. Statement that notice has been provided to Regional Water Board and discharger:

Complete copies of this Petition have been mailed to the following persons and/or organizations:

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North Coast Regional Water Quality Control Board (Agency)
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403

//

Willits Environmental Remediation Trust (Responsible Party)
6016 Princeton Reach Way
Granite Bay, CA 95746

//

4.9. Statement that issues were first raised with the Regional Water Board:

Exhibit B is a copy of the letter that was received January 7, 2009, prior to the meeting held on January 29, 2009 at which the R1WB considered the ORDER. That letter and several other comments explain how WDR No. R1-2009-0001 does not comply with CEQA. Therefore the R1WB was informed that their proceeding was not in compliance with CEQA prior to their taking action.

RESERVATION OF RIGHTS

5. As explained in greater detail in the MEMORANDUM OF POINTS AND AUTHORITIES (P&A) for this PETITION, it is impractical for the State Water Resources Control Board (SWB) to fully evaluate potential CEQA lawsuits. That is because the SWB is a California Public Agency and therefore subject to CEQA independently of the RWBs. PRC §21167.6(e)(11) requires that the full record of proceedings (ROP) before a RWB is part of the ROP before the SWB.

6. Petitioners recognize that it is impractical for the SWB to physically review the approximately 50 volumes of the ROP in this case. Therefore the P&A contains exhibits from the

documents distributed to the R1WB decision making body for the January 29 Meeting that Petitioners believe is sufficient to prove their allegations in this case.

7. Petitioners believe and have brought their belief to the attention of the R1WB that there are many other instances of failure to comply with CEQA. Petitioners do not acknowledge that any of their concerns have been adequately addressed, and hereby reassert all issues brought before the R1WB in this case. Petitioners hereby reserve their right to raise all issues that were brought before the R1WB if Petitioners seek judicial review of the SWB decision in this case.

Dated: March 2, 2009

/s/ Ken Berry,
California Citizens for Environmental Justice

VERIFICATION

8. I, Ken Berry, wrote several letters requesting that the R2WB obey State law between December 2007 and January 2009, including the one attached as Exhibit B. All of the statements in this Petition, in the attached letter that I authored, and in the other letters I submitted concerning this project, are true and correct to the best of my knowledge. Except regarding my conclusions based on facts, all facts stated herein and all documents attached to this Petition are accurate representations of documents in the record of proceedings for the project approved by WDR R1-2009-0001.

9. I so declare under penalty of perjury in Jackson, California.

Dated: March 2, 2009

/s/ Ken Berry,

California Citizens for Environmental Justice

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In Pro Per
10567 Mariposa Avenue
Jackson, CA 95642
Telephone (209) 223-1769

BEFORE THE STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

Ken Berry, and **California Citizens for Environmental Justice** **Petitioners** **North Coast Regional Water Quality Control Board** **Acting Agency**	**PETITION NO. _____** **MEMORANDUM OF POINTS AND AUTHORITIES FOR PETITION FOR REVIEW OF APPROVAL OF WASTE DISCHARGE REQUIREMENTS ORDER No. R1-2009-0001**

INTRODUCTION AND SUMMARY

1. Exhibit A is a copy of Waste Discharge Requirements Order (WDR) No. R1-2009-0001 and Monitoring and Reporting Program No. R1-2009-0001 (ORDER), which was approved by the North Coast Regional Water Quality Control Board (R1WB) on January 29, 2009. According to the unsigned copy on the R1WB website, the ORDER was signed by the R1WB Executive Officer on January 29, 2009.

2. Exhibit C is the Executive Officer's Summary Report dated January 7, 2009. Exhibit D is the Introduction to the Initial Study (IS), which describes the proposed project in greater detail. Exhibit E is a copy of the Responses to Public Comments dated January 14, 2009 that was considered at the January 29, 2009 meeting. Exhibits A, C, D, and E summarize the staff packet for the January 29, 2009 meeting.

3. Exhibit F is a copy of Petitioner's letter dated January 27, 2009, which comments on the staff report for the ORDER. Petitioner also submitted comments on several occasions between December 2008 and January 2009.

4. The issue in this case is whether the R1WB proceeded according to law[1] when it adopted a Mitigated Negative Declaration (MND) for the project approved by WDR No. R1-2009-0001. Petitioner alleges that the record of proceedings (ROP) for this case clearly shows the potential for significant adverse impacts on the environment and therefore it is not appropriate to use an MND for this project. Petitioner alleges that the mitigation measures adopted do not eliminate the potential for a significant adverse impact. In the circumstances of the project underlying this case, it is necessary to prepare an Environmental Impact Report (EIR) before making any discretionary decision. Petitioners allege that the unlawful behavior underlying this action is part of a systematic pattern of evading lawful compliance with CEQA.

STANDARD OF REVIEW

5. This action is being prosecuted pursuant to Water Code (WC) §13320. WC §13320(c) says in part, "In taking any such action, the state board is vested with all the powers of the regional boards under [Division 7 (Water Quality)]." The State Water Resources Control Board (SWB) is a California public agency and therefore itself subject to CEQA. *Friends of Davis v. City of* Davis (3d Dist. 2000) 83 Cal. App.4th 1004 [100 Cal. Rptr. 2d 413] (*Davis*) holds that public agencies

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[1] By complying with the California Environmental Quality Act (CEQA, Public Resources Code (PRC) §21000 et seq.). In addition to approving an MND when an EIR is required, Petitioner alleges that the R1WB and SWB have acted unlawfully by not requiring the Remedial Investigation (RI) to also serve as a Master EIR for the purposes of CEQA.

must examine the whole record when determining whether to prepare an Environmental Impact Report (EIR), and therefore the entire record of proceedings (ROP) is before the State Water Resources Control Board (SWB) in this action.

6. *Friends of B Street v. City of Hayward* (1st Dist. 1980) 106 Cal. App. 3D 988 [165 Cal. Rptr. 514] (*Friends of B Street*) established the "fair argument" standard for determining whether an EIR or an Negative Declaration (ND) must be prepared[2]. Under the fair argument standard, if there is any substantial evidence in the whole record that the proposed action may cause a significant adverse impact or effect on the environment, then an EIR must be prepared. An ND, or MND, may be approved only if the project has no potential for significant adverse impacts, or the project is modified to lessen the impacts to insignificance[3]. The EIR that is prepared must examine all potential impacts, not just the one(s) that supported a particular fair argument.

7. *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (5th Dist. 1995) 33 Cal. App.4th 144 [39 Cal. Rptr.2d 54] (*Stanislaus*) established that courts exercise their own discretion concerning matters of law. In CEQA cases generally, courts must defer to the discretion of public agencies and not substitute the court's own determination, but for the purpose of determining whether the public agency proceeded according to law, the court must make its own determination. Judicial review of the SWB action in this case would proceed under PRC §21168 and Code of Civil Procedure (CCP) 1094.5, and the court will determine whether the SWB abused its discretion by not proceeding according to law. Petitioners will allege that the SWB and R1WB failed to proceed according to

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[2] *Friends of B Street* (supra) was decided in 1980, but it is still relevant for this case. Subsequent CEQA case law has limited the application of this decision when an EIR has already been approved. In this case, the R1WB has never conducted any environmental analysis of the overall remediation project (authorized by Cleanup and Abatement Order (CAO) No. 99-55), to which the project at issue in this action is subordinate.

[3] The alternative to the "fair argument" standard is the "substantial evidence" standard. Under the substantial evidence standard, the courts must uphold the public agency decision if there is any substantial evidence in the whole record that supports the agency. If there is a difference in expert opinion, the agency may decide what to accept and the courts are forbidden to overrule that decision. However, the "substantial evidence" standard is only used after an EIR has been certified. Also, PRC §21092.1 addresses recirculation of a draft EIR and uses a stricter standard than fair argument. This case concerns the initial decision to prepare an environmental document, and therefore the fair argument standard applies in this action.

law when they approved an MND because there is expert testimony from the R1WB itself that there may be a significant adverse impact on the environment, and the ultimate outcome is uncertain.

8. The fair argument standard is that the potential for *any* significant adverse environmental impact triggers requires that an EIR be prepared. Once one potentially significant adverse impact is discovered, it does not matter how many more may be discovered. The purpose of the EIR is to systematically evaluate all of the potential adverse impacts and devise mitigation where necessary and feasible.

9. Therefore, Petitioners have attached hereto sufficient information from the substantial evidence in front of the R1WB decision making body at the time the R1WB approved WDR No. R1-2009-0001 to demonstrate the potential for at least one significant adverse impact. Petitioners also cite evidence from the ROP and have attached copies of certain documents.

10. Petitioners hereby incorporate by reference all of the comments made concerning this project[4]. Petitioners hereby reserve the right to use all issues properly raised in the ROP for this case should Petitioners seek judicial review of the SWB decision in this case.

NATIONAL CONTINGENCY PLAN

11. The word "project" has special meaning to CEQA. The CEQA project is also known as a "response"in the context of the National Contingency Plan (NCP)[5]. PRC §21003(a) and Title 14 of the California Code of Regulations (14 CCR) §15004(c) require that the requirements of the NCP and CEQA be satisfied concurrently, not consecutively. The R1WB has not incorporated the NCP process into its CEQA process.

12. The Willits Environmental Remediation Trust (TRUST) has been given the responsibility for complying with the NCP by the United States District Court. The NCP requires cooperation with

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[4] PRC §21177(a) provides that all issues raised in a lawsuit be brought before the public agency prior to the decision being made. PRC §21177(b) requires that anyone bringing a lawsuit have participated in the decision. The same person need not fulfill both requirements. There is no time period specified in PRC §21177(a).

[5] Title 40 of the Code of Federal Regulations Chapter I Part 300 (40 CFR 300) is the National Oil and Hazardous Substances Pollution Contingency Plan. The acronym NCP is used herein.

local agencies, which in this case means obtaining permits from the R1WB. The TRUST has not integrated its actions pursuant to the NCP with local regulations[6].

13. Both CEQA and the NCP allow for tiering. Under CEQA, a Master EIR (MEIR) should have been prepared for CAO No. 99-55[7]. The MEIR must correspond to the Remedial Investigation (RI) prepared pursuant to the NCP. If such an MEIR existed, it might be appropriate for the current project to be approved with an ND or MND, provided that the MEIR adequately analyzed all of the cumulative impacts of the proposed project. The NCP requires that an analysis be prepared for an Interim Remedial Action (IRA) such as the one underlying this action, and that analysis should also be prepared to satisfy the CEQA requirement for a subsequent or supplemental EIR or ND.

14. Exhibit G is a copy of a letter sent by R1WB to the TRUST that demonstrates the R1WB has not complied with CEQA. The letter answers the TRUST's question concerning what regulatory requirements the R1WB has for the overall project. The R1WB replies that the RI is equivalent to an EIR. That assertion is false because CEQA has a well defined procedure for preparing EIRs that was not followed in this case. Furthermore, R1WB staff have no authority to approve EIRs.

15. There is no specific penalty for violating PRC §21003(a) and 14 CCR §15004(c), except that the MEIR must be prepared before it may be relied on by subordinate projects[8]. Without an

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[6] The TRUST announced the project underlying this action in November 2007 and announced a public comment period ending on January 12, 2008. The TRUST did not apply for a necessary permit until January 18, 2008. The TRUST applied for the WDR underlying this action on August 25, 2008. The TRUST therefore deliberately made it impossible for Responsible Agencies and the public to comment on both the NCP and CEQA procedures at the same time.

[7] CAO No. 99-55 was approved using a Categorical Exemption (CE). That action was just one instance of a long-standing, statewide policy of non-compliance with CEQA. The approval of the CE was unlawful because the Remco site was added to the Cortese List (CL, see Government Code (GC) §65962.5(c)(3)) long before the CAO was issued. The SWB and RWBs routinely violate CEQA by unlawfully citing CE for projects on sites listed in the CL. This is ongoing behavior, as well as being manifest in the absence of an environmental document for the overall project authorized by CAO No. 99-55.

[8] If the RI had been used as the MEIR for the CAO 99-55 project, an MND might be appropriate for the project at issue in this case. But no MEIR was prepared because the R1WB unlawfully avoided any environmental analysis. The approval of CAO 99-55 is not subject to review, but there is no environmental analysis of the cumulative impacts of the entire project.

MEIR, each subordinate project, such as the one at issue in this action, must independently evaluate cumulative impacts.

DIOXINS

16. Comment "(4)" on pages 8 and 9 of Exhibit E discuss dioxins. The declaration mentioned in the response ("unsigned declaration") was in fact submitted into evidence in court, but that is not relevant for a public agency with regard to complying with CEQA. The witness's name, address, and telephone number are included in the declaration. R1WB did not contact me and ask for any verification. The failure to investigate leads is another example of the willfully unlawful behavior of the R1WB.

17. The R1WB has already concluded that there are dioxins on the Remco site. The R1WB believes that dioxins were generated at the nearby hospital and must have contaminated the Remco site, which is downhill of the hospital incinerator[9]. The R1WB has no physical evidence because it has decided not to collect any. The R1WB assumed, without any evidence, that the hospital was the one and only possible source of dioxins in the vicinity of Remco.

18. The R1WB discloses that the matter is still under review[10]. The R1WB was informed in a letter dated September 14, 2008[11]. Furthermore, Exhibit H is the memorandum dated xxx xx, xxxx in which the R1WB explained why it would not test for dioxins. Because the R1WB already knows there are dioxins on the Remco site, the only facts to be determined are the quantities of the

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[9] Exhibit H is a copy of a memorandum in the R1WB administrative record. It discloses that the R1WB believed dioxins were present from the nearby hospital incinerator. Apparently the R1WB staff did not understand that "dioxin" is a name for a variety of similar chemicals. The proportion of the various chemicals varies between sources and can be used to identify the source of pollution. No explanation for the R1WB's reluctance to evaluate whether the environment is contaminated is given beyond believing that something will be found.

[10] The final words of Comment (4) are: "However, we are still reviewing all the site information and will provide it to U.S. EPA for review and request a formal response/recommendation from their dioxin experts. The outcome of the investigation will be provided to the WERT and all interested parties through written correspondence."

[11] The project must be postponed if R1WB cannot complete their work in a timely fashion. This is really another example of the systematic unlawful behavior of the R1WB with regard to environmental impacts.

dioxin congeners used to determine sources. Those facts will determine whether the hospital is the only source of dioxins or not. Other agencies cannot help the R1WB because the R1WB has not collected the information necessary to make an informed opinion. Not obtaining the necessary information prior to approving the project violates the principle set forth in *Sundstrom v. County of Mendocino* (1st Dist. 1988) 303 Cal. App. 3d 296 [248 Cal. Rptr. 352] (*Sundstrom*).

19. Dioxins are relevant to this project as an example of a chemical known to be present at the Remco site which is not characterized. Therefore it is not possible to evaluate the interaction of dioxins with other contaminants and the proposed treatment method.

VINYL CHLORIDE & METALS

20. The fourth paragraph beginning on page 7 of Exhibit D , Introduction to the Initial Study (IS), discloses that the VOCs targeted by the proposed project breakdown into a more toxic variety. The fifth paragraph discusses the possibility of mobilized metals.

21. The IS says these are temporary effects, but provides no supporting data. In fact, the breakdown process is unknown. Well GMX-7A was installed to monitor an earlier IRA and was converted to be an extraction well when heavy metals were mobilized. Extraction was the last of several improvised containment methods, and it is still going on[12].

22. The "mitigation measure" for the possibility that metals will be mobilized is to monitor wells (first paragraph beginning on page 8 of Exhibit D). That is not a valid mitigation measure because the monitoring wells are spaced too far apart. The locations of the monitoring wells are shown in Figure 2 ("Proposed Monitoring Well Locations and Inferred Capture Zones") on page 18 of Exhibit A.

23. A similar map in the RI shows the near surface groundwater flow to be to the northwest. But in an earlier IRA, metals were mobilized and flowed approximately 250 feet due east. That plume was determined at the time to be no more than 60 feet wide. There are many opportunities

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[12] Page 13 and 14 of Exhibit E (Response to Comments) explains that it takes at least 5 years in some parts of the site. No analysis has been done to know if some parts of the site take forever.

for plumes of that size to evade the monitoring wells[13].

24. The proposed mitigation measure will not work unless a plume of contamination happens to impinge on a monitoring well. Furthermore, there is no doubt about whether metals will be mobilized. The preceding tests and IRAs indicate that metals will be mobilized, unless the soils proposed for treatment in this IRA are substantially different from the soils treated similarly in the past. If there is such a difference, it is not disclosed in the proposed MND. Chemical reasons based on the acidity of the water for this phenomenon are discussed in the RI for the project.

25. Therefore, the proposed mitigation is a contingency plan that is known to be necessary, depending only on what monitoring wells detected escaping contamination. Petitioner does not argue that the principle of being ready to convert a monitoring well into an extraction well is not a valid mitigation measure, provided that escaping contamination can be detected. Petitioner does argue that the history of the site demonstrates that the current monitoring network has the potential for a plume to escape detection.

26. As discussed herein (HYDROGEOLOGICAL CHARACTERIZATION) below, there is significant uncertainty in the physical characteristics of the groundwater. If this IRA is like its predecessors, it may be necessary to operate a ring of extraction wells to keep the contamination on site. An obvious alternative is the construction of a fixed barrier to stop the migration of contaminated groundwater. Such a barrier would not require active pumping to maintain. Confining the contaminated groundwater would enable a wider range of treatment strategies because they would not have to consider the spreading contamination. The proposed MND failed to consider the extent and nature of the entire plume, so that an informed decision can be made where to construct a barrier. The ground water on one side will be treated and that on the other side allowed to dissipate into the environment. Only then can an informed decision be made about whether to use an active

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[13] The R1WB is well aware of this contradiction. The TRUST prepared a new groundwater flow diagram in August 2008 after Petitioners pointed out that the RI was unreliable. Instead of complying with CEQA and beginning the process of preparing an EIR, the R1WB conspired with the TRUST to evade CEQA by attempting to use expert testimony to discount a fair argument that an EIR should be prepared.

system of pumps or a physical barrier to stop the spread of contamination[14].

27. *Friends of Davis v. City of Davis* (*supra*) requires public agencies to first determine whether there is the possibility of a significant adverse impact on the environment. The purpose of preparing an EIR is to devise mitigation measures where feasible. The R1WB has wasted a year attempting to accomplish the purpose of an EIR in an Initial Study (IS).

HYDROGEOLOGICAL CHARACTERIZATION

28. The reason for the uncertainty in underground conditions is explained in the second paragraph on page 6 of Exhibit D (Executive Summary of ND). The sediments beneath the site are "deposits of gravel, sand, silt, and clay". It is stated that coarse grained sediments transport water more readily than the finer grained ones. The coarse grained sediments are predicted to be "lenses", and "in some cases the lenses are observed/interpreted to locally interconnect and exhibit varying degrees of hydraulic communication with each other."

29. In light of the uncertain nature of channels between coarse grained lenses, it may be that the mobilized metals did not flow due east, but instead took an irregular path. That does not matter because the overall direction was due east, contradicting the RI and demonstrating that the characterization of the subsurface project setting is at least incomplete[15].

30. The RI did not test the lower two aquifers very far from the presumed sole source of

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[14] Before any informed decision can be made, the site must be objectively characterized. The R1WB unlawfully evaded its responsibility to do so when it used a Categorical Exemption to approve CAO No. 99-55.

[15] Petitioners do not necessarily challenge the facts in the RI. The RI fails to support its conclusions because too few samples were analyzed to characterize the site. For the purpose of the fair argument standard, it is not necessary to determine that the facts or conclusions made from them are inaccurate or erroneous, only that they potentially are mistaken. Petitioners reserve their right to show that the information being relied on by the R1WB is not correct at a later time.

The Lead Agency (LA, the State and/or Regional Water Boards in this case) have a responsibility to comply with CEQA. Among other things, they must examine the whole record when determining whether or not there may be a significant adverse impact associated with the project. The LA may not be sued over issues which were never raised during the approval process, but it is the LA's duty, and only the LA's duty, to analyze the impacts and devise mitigation measures if feasible. Petitioners believe significant information is missing from the RI and that even had the R1WB certified the RI as an MEIR for this project, a Supplemental EIR is now required. Petitioners may make that argument if they seek judicial review of the SWB action in this case.

contamination, and it bases sweeping conclusions on too little information. On page 4-12 (4.5.2.1 Hydrogeologic Zones), the RI says "Although the A-, B-, and C-Zones should not be interpreted as separate water bearing zones, the characteristics of these zones and the distribution of contaminants supports the definition of five unique stratigraphic horizons for site characterization." The first part of that sentence is correct and the RI is flawed, even had it been certified as an EIR, because much of the RI does assume there is no vertical hydrological communications between the zones.

31. The assumption that there are five layers- three aquifers separated by two aquitards- is based on insufficient information. The presumed impermeability of the aquitards is based on two adjacent wells, EW-1A and EW-1B[16]. No other samples were taken, even though the characteristics of the aquitards are known to vary across the site. The analysis in the RI is predicated on the separation of the three zones, beginning with the decision to sample the B- and C-Zones only near the presumed source of contamination. If the aquitards vary in permeability, or have vertical channels connecting the aquifer zones, then extrapolating the result from a single location to the whole site is inaccurate and erroneous.

32. The rate of groundwater flow is also uncharacterized. In the last response on page 9 of Exhibit E (Response to Comments), the R1WB discloses that "the overall site groundwater velocity is estimated to range from 15 to 149 feet per year." It is not clear whether the average groundwater flow rate over the entire site is not known any more accurately than a factor of 10, or whether the groundwater flow rates vary from place to place by a factor of 10. It is clear that the disclosed rate is an estimate. The response was to Petitioner's assertion that the flow rate was as high as 600 feet per year[17].

33. Petitioner mistakenly said "600" when the RI says "559", and the R1WB apparently was

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[16] See page 4-17 in the RI (4.5.2.1.3. A/B-Aquitard). The final paragraph explains how the vertical permeability was determined. The locations of the wells involved, EW-1A and EW-1B, is shown on Figure 3-1 of the RI.

[17] See page 4-26 in the RI (4.5.4.2.4. Calculation of Groundwater Seepage Velocity). The flow rates are given as: A-zone, 15-145 ft/yr; B-zone, 29-559 ft/yr; C-zone, 7-455 ft/yr.

mistaken to say "149" when the RI says "145". However, the response is not responsive because very much higher flow rates are observed in the B-Zone.

PCOC[18] MIGRATION

34. The flow rate is used in Section 6.4.4. on page 6-46 of the RI (PCOC Migration in Groundwater). Various factors affect the way a chemical diffuses in water and therefore the speed at which a chemical appears to spread could be less than the actual flow rate of the groundwater. Page 6-48 contains formulas that were used to compute the Retardation Factors (RFs) in Table 6-3 of the RI.. In particular an A-Zone range of 1.05 to 1.15 is found for 1,4-dioxane[19]. The B-Zone range is found to be 1.07 to 1.23.

35. On Page 6-49 of the RI, the "distribution coefficient" is discussed and the reader is referred to Section 6.3.1.3 on page 6-25, and then Section 6.3.1.3.2. (Organic Matter) on page 6-26 to determine a factor to be used to characterize the site. That factor is multiplied by another factor that characterizes the PCOC and the result is the distribution coefficient[20]. Even though there is a range of over 5:1 for the A-Zone, the RI simply uses the average for each aquifer.

36. This mistaken analysis does not significantly affect the value of 1,4-dioxane to measure the spread of contaminated groundwater because the chemical moves easily in water any way. But this does mean that the RI understates the speed at which other chemicals are migrating offsite.

37. Table 6-3 contains the results of the procedure described in pages 6-46 through 6-49 of the RI (6.4.4. PCOC Migration in Groundwater), but the results are not discussed. Instead, Section 6.4.5. (Estimated Migration Rates) on pages 6-50 through 6-52 uses a historical procedure to

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[18] Preliminary Chemical of Concern.

[19] 1,4-dioxane is useful for analysis because it is soluble and does not readily attach to soil particles. Therefore it appears to move faster in the groundwater than some other chemicals. See first paragraph beginning on page 6-52 for discussion of 1,4-dioxane properties. 1,4-dioxane is also discussed on page 6-40

[20] The actual site characterization factors may be found on page 6-26 of the RI (6.3.1.3.2. Organic Matter) and has zone, low, high, and average: A- 690 3530 1671, A/B- 2640 3630 3130, B- 1690 3840 2580, B/C- 2290 7320 5040, C- 3050 4340 3670. These data were reduced to A- 0.00167 and B- 0.00258 for use in Table 6-3.

estimate migration rates for different PCOCs. The discussion of 1,4-dioxane on page 6-52 uses the factor calculated in Table 6-3 to justify accepting the lowest value for the velocity of ground water in the A-Zone, namely 15 feet per year. The actual numbers used for this calculation are shown in page 6-51 in the table Observed PCOC Migration Rates for 1,4-dioxane. The time (in 2002) since the first use, and the minimum estimated travel distance. That minimum distance is at least 400 feet and therefore the velocity in the A-Zone is at least 15 feet per year[21].

38. The RI incorrectly concludes that the historical analysis supports 15 feet per year as reasonable for the whole site. The actual data shows a range of 15 to 145 feet per second. The RI does not disclose what wells were used to determine the 400 foot minimum on page 6-51. The maximum distance that 1,4-dioxane has traveled is the number that determines the maximum flow rate, not the minimum distance it has traveled.. The details of how the various flow rates were determined is not correlated with the wells where contamination was detected.

39. Nothing in the RI precludes the possibility that 1,4-dioxane moves at the same rate as the highly variable groundwater flow rate measurements indicate. That is, there may be channels in the B-Zone that can transport contaminated ground water at least 559 feet per year, and in the A-Zone at least 145 feet per year. The R1WB is failing to comply with CEQA as long as it fails to gather sufficient information to characterize the site and contamination.

SEIR REQUIRED

40. If the project underlying this action is considered a modification of the project authorized by CAO No. 99-55, then a Subsequent EIR (SEIR) is required. That is consistent with the principle that an SEIR is required when a significant change is made to an EIR that has already been approved, and an Addendum is sufficient if the amended project is adequately described by the existing EIR and mitigation measures. Since there is no existing EIR, every portion of it will be significantly affected.

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[21] The calculated value is 14.81 feet per year, but because this is a minimum value, rounding it to 15 feet per second makes no significant difference.

41. If the project underlying this action is considered to be a subordinate project to the CAO No. 99-55 even though it is not described in the CAO, then a Supplemental EIR (SEIR) is required for every potential impact where the project at issue in this case and the overall CAO No. 99-55 project have common cumulative impacts. Again, the fact there is no existing MEIR means that before any issue can be studied, at least if the issue affects the project at issue here, the effect on the overall project must be analyzed.

ROLE OF REGULATORY AGENCY

42. Starting with the bottom paragraph on page 4 of Exhibit E (Responses to Comments), the R1WB asserts that it is inconsistent with the Regional Board's role as a regulatory agency to be conducting projects. Petitioners do not dispute that and Petitioners have not alleged that the R1WB should take over management of the project. California public agencies, including the R1WB and the SWB, are required to consider the environmental impacts of the projects they propose to approve or carry out. In the project underlying this action, the R1WB is approving a project to be undertaken by the TRUST. The R1WB (and/or the SWB) must comply with CEQA before granting that approval.

CONCLUSION

43. One way for the R1WB to comply with CEQA would be to certify the RI as the MEIR for this project. That has not been done because the RI would have to be significantly revised if it were circulated as a draft EIR.

Dated: March 2, 2009

/s/ Ken Berry,

California Citizens for Environmental Justice

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California Regional Water Quality Control Board
North Coast Region

ORDER NO. R1-2009-0001

WASTE DISCHARGE REQUIREMENTS

FOR

IN-SITU GROUNDWATER TREATMENT

WILLITS ENVIRONMENTAL REMEDIATION TRUST
Former Remco Hydraulics Facility
934 South Main Street
Willits, California

Mendocino County

The California Regional Water Quality Control Board, North Coast Region (hereinafter the Regional Water Board), finds that:

1. The Willits Environmental Remediation Trust (WERT) (hereinafter the discharger) submitted a report of Waste discharge (ROWD) on August 25, 2008 proposing to conduct in-situ treatment of groundwater predominantly contaminated with volatile organic compounds (VOCs). The former Remco Hydraulics Facility is located at 934 South Main Street in Willits, California (APN 006-170-X32, APN 006-170-01, APN 006-170-02, APN 006-170-03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, and 30) (hereinafter the Site), and was a former machine shop and chrome plating facility (Figure 1). The facility began operations as a machine shop in 1945, and the first chrome-plating tank was constructed in 1963. The facility ceased operations in 1995. Soil and groundwater at the Site are contaminated with chromium, VOCs, and other wastes.

2. On December 29, 1995, the City of Willits served both a Notice of Violation and a Notice of Endangerment to Remco Hydraulics and the previous owners of the site. Subsequently, on December 10, 1996, the City of Willits filed its Second Amended Complaint against those same parties for, among other things, the abatement of imminent and substantial endangerment pursuant to the provisions of the federal Resource Conservation and Recovery Act (RCRA), injunctive relief and abatement pursuant to RCRA, nuisance per se pursuant to the City of Willits Municipal Code, abatement of a public nuisance pursuant to California Civil Code section 731 and recovery of nuisance abatement costs, and negligence. The outcome was a Final Consent Decree, Final Order and Final Judgment; Order Establishing the WERT; And Order Of Reference to Special Master (Consent Decree) as entered by the Federal District Court for the Northern District of California between the City of Willits, the owners, and previous owners of the site (Case No. C96-0283 FMS). The Consent Decree established the Willits Environmental Remediation Trust on August 22, 1997 upon entry of the Consent Decree, to investigate and remediate

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the site. Through operation of the Consent Decree, the discharger acquired ownership of the Site.

3. A pilot study using molasses as a reducing agent was conducted in 2000 to convert hexavalent chromium to trivalent chromium in the vicinity of the former plating area, which led to an interim remedial action in 2003. Trivalent chromium is essentially the non-toxic form of chromium. The results of the pilot study and interim remedial action showed decreases in hexavalent chromium concentrations, and the enhanced dechlorination of volatile organic compounds (VOCs). These activities were conducted in compliance with Waste Discharge Requirements Orders No. R1-2000-54 and R1-2003-085.

4. The Site, approximating 9.2 acres, is bordered on the east by South Main Street (Highway 101), on the south by railroad lines, with residential homes and Baechtel Grove School to the south of the railroad line, on the west by horse corrals, residential homes and commercial structures, and on the north by Franklin Street and residential homes.

5. The Site is located on the western margin of the north-northwest trending Little Lake Valley. The Little Lake Valley consists of a thick sequence of fine-textured lake sediments (silts and clays) interlaced with sand and gravel. The site is situated on a sequence of stratified unconsolidated sediments consisting primarily of sands, silts, and clays of alluvial origin. [1]

6. The direction of shallow groundwater flow at the site is predominately to the east-northeast, while in the lower aquifers a more north-northeasterly trend exists. There are three groundwater bearing zones at the site where permeable lenses of sands and gravels have been identified. The A-zone exists from the water table to a depth of approximately 15 to 25 feet below ground surface (bgs), the B-zone from 25 to 40 feet bgs, and the C-zone which begins at 50 to 75 feet bgs. The A-zone is largely unconfined. However, the B- and C-zones are largely confined.[1]

7. Groundwater at the site is contaminated with several compounds: hexavalent chromium; volatile organic compounds; total petroleum hydrocarbons as diesel and motor oil; metals, and semivolatile organic compounds.

8. The discharger proposes to perform an interim remedial action (VOC IRA) designed to reduce VOCs in-situ using a carbohydrate solution of organic molasses or emulsified oil with a vitamin supplement and pH buffer (herein referred to as reducing agents). The discharger has identified five initial areas within the Site where reducing agents will be injected into shallow groundwater. The proposed initial treatment and injection areas are shown on Figure 2. The

[1] Final Remedial Investigation Report, prepared by MWH, dated April 2002.

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breakdown process of VOCs is shown on Figure 3. Additional injections within the Site property lines in the A-zone that differ from the initial injection areas are authorized under these Waste Discharge Requirements in accordance with the terms and conditions of this Order. The details of the first injection program are outlined in the Report of Waste Discharge dated August 25, 2008.

9. Any future injections of reducing agents in the A-zone shall be conducted in accordance with Discharge Specifications B.2 below. B.2 requires that the discharger submit the following information prior to conducting further injection of reducing agents at the site: a) a workplan proposal to the Executive Officer for review and concurrence; b) a proposed groundwater monitoring program; c) a revised contingency plan; and d) a 30-day notification and comment period to the public and all involved agencies. If the Executive Officer finds no new significant impacts or issues, the Executive Officer may concur with the reinjection proposal. The discharger may then conduct additional injections in accordance with the terms of this Order.

10. Injecting reducing agents is commonly used to treat VOC contamination. The treatment process is to provide a food source (reducing agents) for the existing microorganisms in the aquifer. The microorganisms consume the food substances and donate electrons in the course of their metabolism. Once the electron acceptors are depleted, the microorganisms use the chlorinated VOCs as electron acceptors and thereby break VOCs into benign end products. Sufficient food source is needed over a period of time to complete the dechlorination of VOCs to benign breakdown products like carbon dioxide and water.

11. During the breakdown process, parent compounds breakdown to more toxic intermediary VOCs (i.e., vinyl chloride). However, this is temporary and the dechlorination of vinyl chloride continues to occur. Two pilot studies previously conducted at the site demonstrated successful dechlorination of VOCs using molasses and yeast in one area, and a soy oil in another. Data collected from the existing monitoring well network proves that the overall contamination at the Site was reduced as a result of these prior in-situ injections.

12. The injection of reducing agents may also temporarily mobilize iron, manganese, arsenic, and/or antimony. The mobilization of any metals is also temporary and previous studies show that the Site will return to preexisting injection conditions after approximately three to five years. This Order prohibits the migration of any metal mobilized or vinyl chloride produced as part of the treatment process beyond the boundaries of the property owned or controlled by the discharger. In addition, a groundwater monitoring plan and contingency action plan is required to ensure compliance with this prohibition.

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13. Previous groundwater treatment studies have demonstrated that hydraulic control of groundwater migration off-site has been achieved. The travel distance of the reducing agents at each injection point varies from 5 to 15 feet. The proposed injection areas are located within the boundaries of the property (approximately 120 and 350 feet upgradient of the property boundary) allowing a large buffer zone between the injection areas and the Site property boundary. The groundwater velocity at the site is relatively slow (estimated to range from 15 – 149 feet/year), and monitoring will be conducted within one month of the injections followed by quarterly sampling. There are existing extraction wells on site that will continuously operate during the injection and post injection period to prevent off-site migration of contaminated groundwater.

    Groundwater monitoring will be accomplished by sampling 28 groundwater-monitoring wells in the A-zone in accordance with Monitoring and Reporting Program No. R1-2009-0001. No injections are proposed or authorized in the B-zone and C-zone. The groundwater monitoring well locations are depicted on Figure 2. The groundwater monitoring program monitors groundwater conditions at the injection areas, just downgradient of these areas, and near the property boundary.

14. If contaminants are present in groundwater and in close proximity to the site property boundary, the discharger must also activate a contingency action plan that extracts groundwater in order to prevent off-site migration of pollutants. The contingency action shall be required if migrating and increasing concentrations of specific chemicals (VOCs) and metals are observed in certain monitoring wells between the injection areas and the property boundary which is downgradient of the injection areas in the direction of groundwater flow. If contingency action is triggered, the discharger shall convert the downgradient monitoring wells on the property boundary to extraction wells, or drill new extraction wells to effectively control affected groundwater at the site. Discharger has demonstrated its ability to convert a monitoring well to an extraction well within two weeks time, which provides ample time to activate the contingency plan. The contingency action plan is described in more detail in Monitoring and Reporting Program Order No. R1-2009-0001.

15. The injection of reducing agents is consistent with the antidegradation provisions of State Water Resources Control Board Resolution No. 68-16. The in-situ groundwater treatment is designed to accelerate cleanup at the Site and ultimately restore the beneficial uses of groundwater.

16. The Regional Water Board's Water Quality Control Plan for the North Coast Region includes water quality objectives and receiving water limitations.

17. Surface water in the Little Lake Valley flows to the Eel River. The beneficial uses of the Eel River and its tributaries include:

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a. municipal and domestic supply
b. agricultural supply
c. industrial service supply
d. groundwater recharge
e. navigation
f. hydropower generation
g. water contact recreation
h. noncontact water recreation
i. commercial and sport fishing
j. warm freshwater habitat
k. cold freshwater habitat
l. wildlife habitat
m. preservation of areas of special biological significance
n. preservation of rare and endangered species
o. migration of aquatic organisms
p. spawning reproduction, and/or early development

18. Beneficial uses of groundwater include: municipal, domestic, industrial process and service supply, and agricultural water supply as identified in the Water Quality Control Plan for the North Coast Region.

19. Drinking water for the Remco facility and nearby residents is provided by the City of Willits municipal water system. The City of Willits water supply is located south of town, and is tested regularly to assure compliance with State of California drinking water standards. Individual water supply wells exist in the City limits and are used predominantly for irrigation.

20. The Regional Water Board will file a Notice of Determination within five days from the issuance of this Order. The Regional Water Board is the lead agency for this project under the California Environmental Quality Act (Pub. Resources Code, section 21000 et seq.) (CEQA) and has prepared an Initial Study/Checklist in accordance with title 14, California Code of Regulations, section 15063. On November 21, 2008, the Regional Water Board provided notice of intent to adopt a mitigated negative declaration (SCH No.**2008012079**) for the project. (Cal. Code Regs., tit. 14, § 15072.) The mitigated negative declaration reflects the Regional Water Board's independent judgment and analysis. After considering the initial study/checklist and other documents and comments received during the public review process, the Regional Board hereby determines that the proposed project with mitigation measures, will not have a significant effect on the environment. The mitigated negative declaration is hereby adopted. The documents or other material, which constitute the record, are located at Regional Water Board offices located at 5550 Skylane Blvd, Santa Rosa, California.

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21. The Regional Water Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit written comments and recommendations.

22. The Regional Water Board, at a public meeting on January 29, 2009, heard and considered all comments pertaining to the discharge.

THEREFORE, IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. The discharge of any waste not specifically regulated by this Order is prohibited.

2. Creation of a condition of pollution, contamination, or nuisance, as defined by Water Code section 13050, is prohibited.

3. The discharge of reducing agents to land, surface waters or to groundwater in areas beyond the boundaries of the Site owned or controlled by the discharger is prohibited.

4. The migration of any metal mobilized by the interim remedial action or VOCs or other byproducts produced as part of the treatment process is prohibited beyond the boundaries of the property owned or controlled by the discharger.

5. The discharge of waste to property not owned or controlled by the discharger is prohibited.

B. DISCHARGE SPECIFICATIONS

1. The injection of reducing agents shall not impart taste, odor, or color to or otherwise degrade the beneficial uses of areal groundwater beyond the boundaries of the property owned or controlled by the discharger.

2. The methods for injection and reinjection of reducing agents at the site shall be conducted as described in the ROWD dated August 25, 2008. For additional A-Zone injections at the site, the following items shall be submitted: a) a workplan proposal to the Executive Officer for review and concurrence, b) a proposed groundwater monitoring program; c) a revised contingency plan, and d) a 30-day notification and comment period to the public and all involved agencies. If the Executive Officer finds no new significant impacts or issues, the Executive Officer may concur with the reinjection proposal. The discharger

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may then conduct additional injections in accordance with the submitted plans and the terms of this Order.

C. PROVISIONS

1. The discharger shall comply with all mitigation measures identified in the Mitigated Negative Declaration for Willits Environmental Remediation Trust, Former Remco Hydraulics Facility, In-Situ Groundwater Treatment. The discharger shall implement the project as described in this Order. Compliance with mitigation measures identified in the mitigated negative declaration are requirements under this Order. Violation of any requirements subject the discharger to enforcement action, including administrative civil liability, under the Water Code.

2. The discharger shall comply with all the requirements, conditions and provisions set forth in Monitoring and Reporting Program No. R1-2009-0001. The Executive Officer of the Regional Water Board retains discretion to modify provisions of the Monitoring and Reporting Program.

3. The Waste Discharge Requirements in no way alleviates the discharger from its responsibilities to comply with the Consent Decree (Case No. C96-0283 FMS) or any other applicable laws and regulations.

4. A copy of this Order shall be kept at the discharge facility for reference by operating personnel at all times. Key operating personnel shall be familiar with its contents.

5. Severability

   Provisions of these waste discharge requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.

6. Operation and Maintenance

   The discharger must maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.

7. Change in Ownership

   In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the following items by letter, in

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advance of the transfer of ownership or control, and a copy of the notice shall be forwarded to the Regional Water Board:

a. existence of this Order, and
b. the status of the dischargers' annual fee account.

8. Vested Rights

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from his liability under federal, state, or local laws, nor create a vested right for the discharger to continue the waste discharge.

9. Monitoring

The discharger must comply with the Contingency Planning and Notification Requirements Order No. 74-151 and the Monitoring and Reporting Program No. R1-2009-0001 and any modifications to these documents as specified by the Executive Officer. Such documents are attached to this Order and incorporated herein.

a. Order No. 74-151 requires immediate incident reporting of unintentional or accidental spills (including emergency response actions) and diligent action to abate the effects of the discharge. Written confirmation of the incident is required within two weeks of notification.
b. General Monitoring and Reporting Provisions require sampling and analysis performance criteria in addition to compliance reporting criteria and time frames.

10. Inspections

In accordance with Water Code section 13267(c), the discharger shall allow staff of the Regional Water Board:

a. entry upon premises in which an effluent source is located or in which any required records are kept;
b. access to copy any records required to be kept under terms and conditions of this Order;
c. inspection of monitoring equipment or records; and
d. sampling of any discharge.

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11. Noncompliance

In the event the discharger is unable to comply with any of the conditions of this Order due to:

a. breakdown of waste treatment equipment;
b. accidents caused by human error or negligence; or
c. other causes such as acts of nature;

The discharger shall notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the noncompliance and shall indicate the steps taken to correct the problem and the dates thereof, and the steps being taken to prevent the problem from recurring.

12. Significant Changes in Discharge

The Discharger shall notify the Regional Water Board before making any change or proposed change in the character, location, or volume of the discharge. Discharger shall file a report of Waste Discharge and a new order is required for any significant changes.

Certification

I, Catherine Kuhlman, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on January 29, 2009.

_____

Catherine Kuhlman
Executive Officer

California Regional Water Quality Control Board
North Coast Region

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MONITORING AND REPORTING PROGRAM NO. R1-2009-0001

FOR

IN-SITU GROUNDWATER TREATMENT

WILLITS ENVIRONMENTAL REMEDIATION TRUST
Former Remco Hydraulics Facility
934 South Main Street
Willits, California

Mendocino County

MONITORING

The groundwater monitoring program consists of sampling a total of 28 A-zone wells identified as primary performance wells IMW-1, IMW-2, IMW-3, IMW-4, IMW-5, MLW-10U, MLW-7-1, W26A, W28A, W12A, W29A1, W51A, W38A; secondary performance wells MLW-4-1, W50A, W27A, IMW-6, W22A, IMW-,7 W54A, IMW-10, IMW-11, IMW-12, and contingency wells W19A, IMW-8, W18A, IMW-9, IMW-10, and W17A. IMW-10 is both a secondary performance well and a contingency well.

The primary performance wells are located within or in close proximity to the injection areas, the secondary performance wells are located downgradient of the injection areas, and the contingency monitoring wells are located near the property boundary. The wells and injection areas are depicted on Figure 2.

Pre-Injection Groundwater Monitoring

1. The 28 A-zone groundwater monitoring wells shall be sampled prior to the injection of the reducing agents for the constituents listed in the Table 1 below. The sampling will establish baseline conditions for the contingency plan.

2. The depth to groundwater shall be determined to at least 0.01 foot increments in the 28 A-zone groundwater monitoring wells prior to injection.

Post-Injection Groundwater Monitoring

3. The depth to groundwater shall be determined to at least 0.01 foot increments in all A-zone wells during the injection, and during all sampling events.

4. The primary performance wells shall be sampled within 30 days of the injection program, followed by quarterly sampling for volatile organic compounds, 1,4-Dioxane, and dissolved iron, manganese, arsenic and antimony. The analytical methods are listed in Table 1 below. These monitoring wells shall be sampled quarterly for the duration of the treatment process.

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5. The downgradient secondary performance wells shall be added to the quarterly monitoring program if increasing concentrations of byproducts such as dissolved metals or vinyl chloride are observed at the upgradient primary monitoring well locations.

6. The downgradient contingency monitoring wells shall be added to the quarterly monitoring program if increasing concentrations of byproducts such as dissolved metals or vinyl chloride are observed at the upgradient secondary performance monitoring well locations.

7. All groundwater monitoring wells shall be sampled for the following constituents using the methods provided below for the baseline sampling:

TABLE 1

Constituent	EPA Analytical Method
VOCs	Method 8260(B)
1,4-Dioxane	Method 8270C low level
Dissolved Iron, Manganese, Arsenic and Antimony	Method 6010/6020B
Alkalinity	Method 310.1
Nitrate	Method 300.0
Sulfate	Method 300.0
Dissolved Organic Carbon	Method 415.1
Redox Potential, pH, Dissolved Oxygen, Temperature, Conductivity	Field Measurements

8. All laboratory analyses must be performed by a laboratory certified for those analyses by the State of California Department of Health Services. Analytical methods for sample analyses shall achieve practical quantification reporting limits that are adequate for evaluating regulatory action levels for each constituent.

9. Contingency Plan

   The degradation of VOCs may result in temporary increases of certain VOC breakdown compounds (e.g., vinyl chloride). Further, these injections may temporarily mobilize naturally-occurring iron, manganese, arsenic and/or antimony in groundwater at the Site. No contingent actions are intended to be implemented as long as increasing concentrations of trigger constituents (VOCs and metals) are fully contained within the property boundary. If, due to the IRA, verified increases of trigger constituents are observed in contingency wells located near the property boundary, then the discharger will implement a contingent action (i.e., groundwater extraction) to control the migration of contaminated shallow groundwater off the Site.

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Trigger Levels

A trigger level is achieved when an increasing trend of a VOCs (e.g., vinyl chloride and metals) is observed and/or is above its appropriate drinking water standards (e.g., California Maximum Contaminant Level or MCLs), in any of the following secondary performance and/or contingency monitoring wells: IMW-10, IMW-11, IMW-12, WI9A, IMW-8, WI8A, IMW-9, or WI7A. The results of groundwater sampling will be evaluated by trend analysis using a Mann-Kendall Test.[1] If an upward trend is detected at a 95 percent confidence level, and the MCL is exceeded for the constituent with the observed increasing trend, the well will be resampled within three days of receipt of data from the analytical laboratory. The subject sample will be analyzed with an expedited turn-around time to confirm the results. If the resampling confirms an increasing trend, sampling of contingency monitoring wells shall commence within one week.

The discharger shall provide verbal notification within 48 hours, and submit a letter notifying the Executive Officer of any increasing trends, determined by the methods described above, within 5 working days of the receipt of the results from the laboratory (5 working days will provide sufficient time for the discharger to review and verify the data and perform the statistical analysis required to verify the increasing trend).

Contingency Actions

If an increase in VOCs or metals is confirmed at any contingency well, groundwater extraction will commence to control shallow groundwater migration in the subject area. Based on an evaluation of the current capture zones associated with extraction wells W20A, W52A, and GMX-7A, it is anticipated that extracting from existing wells IMW-8, WI8A and IMW-9 will effectively control the shallow groundwater downgradient of the proposed IRA along the property boundary (see Figure 2). If warranted, additional groundwater extraction will be conducted at the contingent monitoring wells or other existing wells as directed by the Executive Officer.

The discharger shall install additional extraction wells on the Site as directed by the Executive Officer to control off-site migration.

[1] A description of the Mann-Kendall Test is provided as Attachment I.

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Additional Monitoring and Extraction Wells

To mitigate any delays related to implementing the contingency action and provide additional data to evaluate the effectiveness of the IRA, the discharger will install three additional monitoring wells (to be identified as IMW-l0, IWM-11 and IMW-12) at the locations shown on Figure 2, prior to injection activities. Monitoring well IMW-10 is proposed to be located immediately upgradient of W19A and will be used as an extraction well if trigger levels are achieved in this area.

The discharger shall include monitoring well IMW-10 as a secondary performance well and a contingency well in the IRA monitoring program. Monitoring wells IMW-11 and IMW-12 are proposed to be located upgradient of IMW-8 and W18A, respectively. These wells are intended to provide additional resolution of groundwater conditions downgradient of the injections areas while still significantly upgradient of the property boundary and contingency wells. Monitoring wells IMW-11 and IMW-12 will also be used as secondary performance monitoring wells. If increasing concentrations of trigger constituents are confirmed in monitoring well IMW-12 (upgradient of W18A), the discharger will install another monitoring well immediately upgradient of W18A. This well, IMW-13, will be converted to an extraction well as needed.

REPORTING

10. The depth to groundwater shall be determined to at least 0.01 foot increments in all A-zone wells identified above prior to injection, during the injection, and during all sampling events.

11. The results of the all sampling events shall be submitted within 30 days following the sampling event. The monitoring report shall summarize all monitoring data collected for the in-situ treatment, and include signed laboratory reports and field logs with instrument calibration records and measurements.

12. Verbal reporting to Regional Water Board staff shall be provided within 48 hours of receipt of sampling data that triggers the Contingency Actions.

13. Monitoring data and reports shall also be submitted electronically to the State Water Resources Control Board's Geographic Environmental Information Management System database (GeoTracker) as required by Title 23, Division 3, Chapter 30, Article 2, Sections 3890-3895 of the California Code of Regulations).

Ordered by _____

Catherine Kuhlman
Executive Officer

January 29, 2009

Ken Berry 10567 Mariposa Avenue, Jackson, CA 95642 berry-k@sbcglobal.net

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January 4, 2009

North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, #A
Santa Rosa, CA 95403-1072

Re: Remco In-Situ VOC Remediation

This letter is to comment on the Negative Declaration (ND) proposed to be adopted by the North Coast Regional Water Quality Control Board (R1WB) for the in-situ groundwater remediation project first proposed by the Willits Environmental Remediation trust (Trust) in November 2007, and for which the Trust closed the comment period required by the National Contingency Plan (NCP) before applying any permits from the R1WB. This is the same project that the R1WB proposed to approve in March and June of 2008, prior to the Trust applying for a National Pollution Discharge Elimination System (NPDES) permit.

An ND is not an appropriate document for this project for two reasons. A full Environmental Impact Report (EIR) is required to determine the cumulative impacts of the overall remediation project authorized by Cleanup and Abatement Order (CAO) 99-55. Only when that document is prepared can the appropriate document for the in-situ project be determined.

An ND is not appropriate because there exists the possibility of significant adverse impacts or effects on the environment. These possibilities are documented in the proposed ND itself in at least two ways. First, the breakdown of chlorinated organic compounds to vinyl chloride is discussed, along with the fact that the vinyl chloride is more toxic that at least some of the precursor compounds. The proposed ND does not explain how long the vinyl chloride will exist before breaking down, apparently because the project proponent does not know. Second, maps are presented that show the effect of extraction wells on surrounding groundwater. Those maps show that the effect is smaller than the distance between some monitoring wells and that therefore a plume of contaminated water can escape the site, as happened when a similar project was implemented without proper environmental analysis.

Furthermore, the R1WB has never performed an independent analysis of the environmental effects of any Remco project. The R1WB staff has acted as agents of the Trust by merely accepting whatever conclusions were put forth by the Trust. That failure to provide oversight resulted in the mobilization of arsenic off site in the previous project. The R1WB depends on the Trust for analysis, but the Trust works for the party responsible for the pollution at the site.

Exhibit A, attached to this letter, is two pages of the Securities and Exchange Commission (SEC) Form 10-K filed by Pepsi Americas, Inc. (RP, for responsible party) for the fiscal year ended December 30, 2006. The first page is the title page of the Form. The second page is identified as F-37 and is part of Footnote No. 18 to the consolidated financial statements.

The third paragraph indicates that the RP "employed an outside consultant" to prepare an

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environmental analysis of the Remco facilities in Willits in 2001. The study referred to must be the study that produced the Remedial Investigation (RI) prepared by the Willits Environmental Remediation Trust (Trust). Except for the Regional Board, the only institution with "experience" regarding the site is the Trust, and all of the individuals with experience with the site work for the Trust or a contractor to the Trust.

It is not my purpose to criticize the RP for hiring a contractor to provide advice. I do observe that the purpose of the study commissioned by the RP was to evaluate financial risk for inclusion in the SEC Form 10-K and 10-Q reports, and therefore that minimizing the apparent risk would have a favorable effect on the attractiveness of the RP's stock to investors.

The RI was prepared to substantiate statements in financial reports, so the RI cannot represent the independent analysis of the Regional Board.

The R1WB has taken the position that the RI is equivalent to an EIR. While that may be true as a matter of fact, it is not lawful for the R1WB staff to approve CEQA documents without the participation of the R1WB Board. As a matter of law, the RI is not an EIR. It may be possible for the R1WB to adopt the RI as an EIR, but that has to be done in compliance with the procedures set forth in CEQA, and not by means of a letter written by R1WB staff to the Trust.

In fact, the RI contains false information concerning the direction of groundwater flow. The direction indicated by the RI was contradicted by the prior projects that injected solutions into the groundwater. Recent mapping purports to show the effect of extraction wells in the area where the R1WB allowed mobilized arsenic to escape the site, but do not examine other areas of the site.

The RI also fails to determine the extent of contamination, both by failing to sample with a high enough spatial frequency to detect the channels that move groundwater in directions different than predicted by the RI and by not testing for chemicals. The R1WB, by relying solely on the advice of the Trust, and therefore the RP's contractor, has failed to characterize all of the chemicals of concern at the site and test for their presence.

Even the tests actually made are inadequate because the R1WB has accepted the Trust's determination that the edge of the plume of contaminated groundwater has been determined even though there is no positive determination, such as a line of monitoring wells showing no contamination that is spaced closer than the minimum sized channel for underground water flow.

However, the R1WB has failed to determine the extent of contamination by dioxins and highly mobile chemicals such as MBTE. The R1WB has accepted contradictory evidence concerning the rate of groundwater flow of up to 600 feet per year. That rate is sufficient for chemicals to move over a mile during the period in which the R1WB has failed to perform any independent environmental analysis.

Ken Berry,
California Citizens For Environmental Justice

State of California
Regional Water Quality Control Board
North Coast Region

Janice M. Goebel
January 7, 2009

E1

EXECUTIVE OFFICER'S SUMMARY REPORT
8:30 a.m., January 29, 2009
David C. Joseph Hearing Room
5550 Skylane Boulevard, Suite A
Santa Rosa, California

Item: 3

Subject: Public Hearing to Consider Adoption of Waste Discharge Requirements Order No. R1-2009-0001 for In-Situ Groundwater Treatment and a Mitigated Negative Declaration and Environmental Checklist for the Former Remco Hydraulics Facility, 934 South Main Street, Willits, Mendocino County.

Background

The Remco Hydraulics Facility (Remco) is a former machine shop and chrome plating facility located at 934 South Main Street in Willits, California (Figure 1*). Remco began operations as a machine shop in 1945. Chrome plating operations began around 1963 and ceased in 1995.

Metal cleaning solvents and other petroleum-based products such as cutting oils were used in the operation of the machine shop. Chrome plating operations required the use of high strength hexavalent chromium solutions, and solvents for degreasing purposes. The plating operations included the use of two horizontal chrome plating tanks, and five vertical tanks. Faulty design of tanks and chemical handling systems, coupled with spills, leaks, and unpermitted waste disposal activities over the operational period of the facility resulted in hexavalent chromium, volatile organic compounds (VOCs) and petroleum hydrocarbon contamination of soil and groundwater. VOCs are the predominant contaminants in groundwater at the site.

On December 10, 1996, the City of Willits filed a suit in Federal Court against Remco and the previous owners, seeking abatement of imminent endangerment pursuant to provisions of the federal Resource Conservation and Recovery Act (RCRA). The outcome was a negotiated settlement (Consent Decree) between the City of Willits, Remco Hydraulics, Inc., M-C Industries, Inc., Pneumo Abex Corporation, and Whitman Corporation. The Regional Water Board is not a party to the Consent Decree.

A final Consent Decree, Final Order, and Final Judgment (Case No. C-96-0283 FMS) established the Willits Environmental Remediation Trust, and was entered by the federal district court on August 22, 1997. Through this Consent Decree, the Willits Environmental Remediation Trust (WERT) acquired title to the Remco property. The purpose of the WERT is to design and implement projects to cleanup and abate the effects of soil and groundwater contamination at the Remco site, on behalf of the

* Figures are attachments to the proposed Waste Discharge Requirements

responsible parties, as directed by the Court and as directed by the Regional Water Board's Cleanup and Abatement Order No. 99-55. As part of its compliance with the judicial order and the Regional Water Board's enforcement action, the WERT is proposing an Interim Remedial Action (IRA) to dechlorinate VOCs in groundwater.

The efficacy of the proposed project was demonstrated in a pilot study conducted in 2000/2001 (*Final Post-Injection Report on Pilot Study of In-Situ Chromium Reduction, Former Remco Hydraulics, Inc., Facility, Willits, California*), and an *Interim Remedial Action (IRA) to Reduce Hexavalent Chromium* in 2003. The pilot study and IRA demonstrated the effectiveness of reducing hexavalent chromium using molasses and found that the molasses also enhanced the dechlorination of VOCs. In addition, another pilot study was conducted during 2003 on the west side of the plant that involved injections of molasses to groundwater in one area, and soy oil in another area to evaluate the effectiveness of dechlorinating VOCs. The results of the study showed reductions in parent compounds of VOCs, and increases in daughter (breakdown) products. Most importantly, the dechlorination is continuing beyond the daughter products to ethenes and ethanes (Figure 3). No significant adverse environmental effects were found to result from that effort based on air and water monitoring and related reporting requirements.

Project Description

The proposed project consists of an interim remedial action designed to dechlorinate VOCs in-situ (in-place), using a carbohydrate solution of organic molasses or emulsified oil with a vitamin supplement and pH buffer (hereinafter referred to as reducing agents). The WERT is proposing to inject the reducing agents into shallow groundwater initially at five identified locations or areas on the site, and based on its effectiveness, may expand to other areas within the Site (Figure 2). The Site includes Assessor Parcel Nos. APN 006-170-X32, APN 006-170-01, APN 006-170-02, APN 006-170-03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, and 30. This Mitigated Negative Declaration and Environmental Checklist and the proposed Waste Discharge Requirements regulate and evaluate the reducing agent injections to enhance cleanup of shallow groundwater at the Site.

The five initial locations include injection points in the A-zone to 20 feet below ground surface. The treatment areas are described in the Report of Waste Discharge dated August 25, 2008. For additional injections at the Site, the following items shall be submitted: a) a workplan proposal to the Executive Officer for review and concurrence, b) a proposed groundwater monitoring program; c) a revised contingency plan, and d) a 30-day notification and comment period to the public and all involved agencies. If the Executive Officer finds no new significant impacts or issues, the Executive Officer may concur with the reinjection proposal. The discharger may then perform additional injections to complete remediation of the VOC contaminated groundwater in the A-zone.

The VOC treatment process is to provide a food source for the existing microorganisms in the aquifer. The microorganisms consume the food substances and donate electrons in the course of their metabolism. Once the electron acceptors are depleted, the

microorganisms use the chlorinated VOCs as electron acceptors. Sufficient food source is needed over a period of time to complete the dechlorination of chlorinated VOCs to benign breakdown products like carbon dioxide and water. Therefore, more than one injection may be necessary to provide a sufficient food source to complete the dechlorination process.

The WERT has indicated that the injection of reducing agents may temporarily mobilize iron, manganese, arsenic, and/or antimony. In addition, the injection will temporarily create an increase in the concentration of vinyl chloride in the injection areas. Breakdown products from treatment of VOCs were observed in the 2000/2001 Pilot Study as well as the 2003 *Interim Remedial Action to Reduce Hexavalent Chromium*. The *Interim Remedial Action to Reduce Hexavalent Chromium* mobilized arsenic in one groundwater monitoring well located on the east side of the property. Several groundwater extraction wells were installed to control the migration of arsenic off-site. The extraction system was effective in preventing the migration of arsenic off-site. Since that time, arsenic concentrations in this one well are at background concentrations of <5 ug/l (parts per billion).

Because of the potential to mobilize metals and generate vinyl chloride as part of the dechlorination process, a contingency plan is proposed. The contingency plan consists of sampling groundwater monitoring wells located within the injection areas, downgradient of the injection areas, and in contingency wells located near the property boundary. If mobilized metals and/or vinyl chloride threatens to migrate off of the Site, groundwater extraction wells located along the property boundary will be connected to the existing groundwater treatment system and pumped to control off-site migration. If additional injections are proposed in other areas of the Site where the existing monitoring program and contingency plan may not fully address, the discharger is required to submit a revised monitoring program and contingency plan. The revised monitoring program and contingency plan will identify the groundwater monitoring wells that will be sampled, the contingency wells to control off-site migration, and could include the proposal for drilling of additional extraction wells, if needed. The extraction wells can be drilled and connected to the existing treatment system within a short period of time. The monitoring program and contingency plan to prevent off-site migration are included as part of the Waste Discharge Requirements (WDRs).

Initial Study/Checklist and Mitigated Negative Declaration

Staff prepared and circulated for comment an Initial Study/Checklist and Mitigated Negative Declaration for the in-situ treatment of VOCs in groundwater. It was prepared in accordance with title 14, California Code of Regulations, Section 15063.

Staff has determined, on the basis of the Initial Study/Checklist and the documents and sources referenced therein, that the project will not have a significant adverse impact on the environment, provided that the mitigation measures identified in the project applicant's Report of Waste Discharge (ROWD) and the related Initial Study/Checklist are included in the project. Staff has determined that the proposed project will have a

significant beneficial effect on the environment, and is necessary to move the site towards compliance with Cleanup and Abatement Order No. 99-55.

C4

Public Comments

This item was originally scheduled for Regional Water Board consideration at its March 6, 2008 meeting. The City of Willits requested additional time to review the proposed project, and the March 6, 2008 public hearing was cancelled and rescheduled to June 12, 2008. The public comment period was extended from February 20, 2008 to April 30, 2008. On June 5, 2008 and on June 10, 2008, substantial public comments were received before the June 12, 2008 public hearing. The discharger concurrently proposed modifications to the project, and the public hearing was cancelled. Following submittal of a revised ROWD dated August 25, 2008, the public hearing was rescheduled to January 29, 2009. Prior to circulation of the draft WDRs to the State clearinghouse on December 3, 2008, the June 12, 2008 draft permit was revised in consideration of the August 25, 2008 revised ROWD and previously submitted public comments. Additional public comments were received during the December 3, 2008 through January 5, 2009 comment period, but have not raised any significant issues resulting in modifications to the draft WDRs. A copy of the public comments received as well as staff's responses are attached to the agenda package.

PRELIMINARY STAFF RECOMMENDATION: Adopt Waste Discharge Requirements Order No. R1-2009-0001 for the In-situ Groundwater Treatment, including the Mitigated Negative Declaration and Environmental Checklist.

D1

INITIAL STUDY/CHECKLIST AND MITIGATED NEGATIVE DECLARATION

Prepared for and by

North Coast Regional Water Quality Control Board

Willits Environmental Remediation Trust
Former Remco Hydraulics Facility
934 South Main Street
Willits, California
Mendocino County

In-Situ Groundwater Treatment

December 2, 2008

North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403

INITIAL STUDY/CHECKLIST AND MITIGATED NEGATIVE DECLARATION

D2

This Initial Study/Checklist and Mitigated Negative Declaration has been prepared in accordance with section 21080(c) of the Public Resources Code and California Code of Regulations, title 14, sections 15070 and 15071. The Mitigated Negative Declaration is proposed for adoption at a meeting of the California Regional Water Quality Control Board, North Coast Region, on January 29, 2009.

Project Title:	In-Situ Volatile Organic Compound Groundwater Treatment
Project Location/Address:	Former Remco Hydraulics Site, 934 South Main Street, Willits, California, Mendocino County (See Figure 1)
Lead Agency:	California Regional Water Quality Control Board, North Coast Region, 5550 Skylane Boulevard, Suite A, Santa Rosa, CA 95403
Decision Making Body:	California Regional Water Quality Control Board, North Coast Region
Project Applicant:	Willits Environmental Remediation Trust, 6016 Princeton Reach Way, Granite Bay, California 95746.

Project Description: The Willits Environmental Remediation Trust (WERT) is proposing to conduct interim remediation activities, specifically to treat groundwater in-place (in-situ) that is contaminated primarily with volatile organic compounds (VOCs) using a carbohydrate solution of organic molasses or emulsified oil with a vitamin supplement and pH buffer (hereinafter referred to as reducing agents). More details are provided in documents titled: Addendum No. 2 to the Interim Remedial Action Work Plan for In-Situ Treatment of VOCs in Shallow Groundwater dated August 25, 2008; which was submitted for the Regional Water Board's consideration of Waste Discharge Requirements under applicant's Report of Waste Discharge (ROWD). There are five initial areas where reducing agents will be injected (Figure 2). Based on the effectiveness, reducing agent injections may expand to other areas within the Site. The Site includes Assessor Parcel Nos. APN 006-170-X32, APN 006-170-01, APN 006-170-02, APN 006-170-03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, and 30.

Prior to the selection of in-situ treatment as the interim remedial action, the project proponent conducted an evaluation of three alternatives: 1) the no action alternative, 2) standard groundwater pump and treat with a discharge of treated effluent to the sanitary sewer, and 3) in-situ treatment to enhance the dechlorination of VOCs. In addition, an analysis of applicable regulatory standards, and details of the treatment process was conducted (injection rates, pressures, depths of each injection point, chemical mixtures, soil stratigraphy, monitoring, and provisions for a contingency plan).